

## Daily Epidemiologic Summary

# COVID-19 in Ontario: January 15, 2020 to December 20, 2020

This report includes the most current information available from CCM and other case management systems (CCM plus) as of **December 20, 2020**.

Please visit the interactive [Ontario COVID-19 Data Tool](#) to explore recent COVID-19 data by public health unit, age group, sex, and trends over time.

A weekly summary report is available with additional information to complement the daily report.

This **daily** report provides an epidemiologic summary of recent COVID-19 activity in Ontario. The change in cases is determined by taking the cumulative difference between the current day and the previous day.

## Highlights

- There are a total of 158,053 confirmed cases of COVID-19 in Ontario reported to date.
- Compared to the previous day, this represents:
  - An increase of 2,123 confirmed cases (percent change of -8.3%)
  - An increase of 17 deaths (percent change of -32.0%)
  - An increase of 1,654 resolved cases (percent change of -14.3%)

In this document, the term 'change in cases' refers to cases publicly reported by the province for a given day. Data corrections or updates can result in case records being removed and or updated from past reports and may result in subset totals for updated case counts (i.e., age group, gender) differing from the overall updated case counts.

The term public health unit reported date in this document refers to the date local public health units were first notified of the case.

## Case Characteristics

**Table 1a. Summary of recent confirmed cases of COVID-19: Ontario**

	Change in cases December 19	Change in cases December 20	Percentage change December 20 compared to December 19	Cumulative case count as of December 20
Total number of cases	2,316	2,123	-8.3%	158,053
Number of deaths	25	17	-32.0%	4,167
Number resolved	1,931	1,654	-14.3%	134,867

**Note:** The number of cases publicly reported by the province each day may not align with case counts reported to public health on a given day; public health unit reported date refers to the date local public health was first notified of the case. Data corrections or updates can result in case records being removed and or updated from past reports.

**Data Source:** CCM plus

**Table 1b. Summary of recent confirmed cases of COVID-19 by age group and gender: Ontario**

	Change in cases December 19	Change in cases December 20	Cumulative case count as of December 20
Gender: Male	1,146	1,033	77,548
Gender: Female	1,157	1,075	79,521
Ages: 19 and under	345	293	20,261
Ages: 20-39	764	785	57,756
Ages: 40-59	704	577	45,297
Ages: 60-79	335	314	22,673
Ages: 80 and over	163	153	12,032

**Note:** Not all cases have a reported age or gender reported. Data corrections or updates can result in case records being removed and or updated from past reports and may result in subset totals (i.e., age group, gender) differing from past publicly reported case counts.

**Data Source:** CCM plus

**Table 2. Summary of recent confirmed cases of COVID-19 in school aged children by age group, August 30 to December 20, 2020: Ontario**

	Change in cases December 19	Change in cases December 20	Cumulative case count from August 30 to December 20
Ages: 4 to 8	59	52	3,226
Ages: 9 to 13	77	73	4,472
Ages: 14 to 17	100	69	4,334

**Note:** Includes all confirmed cases of COVID-19 for specified ages, regardless of school attendance. Data corrections or updates can result in case records being removed and or updated from past reports and may result in subset totals (i.e., age group) differing from past publicly reported case counts.

**Data Source:** CCM plus

**Table 3. Summary of recent confirmed cases of COVID-19 in long-term care homes: Ontario**

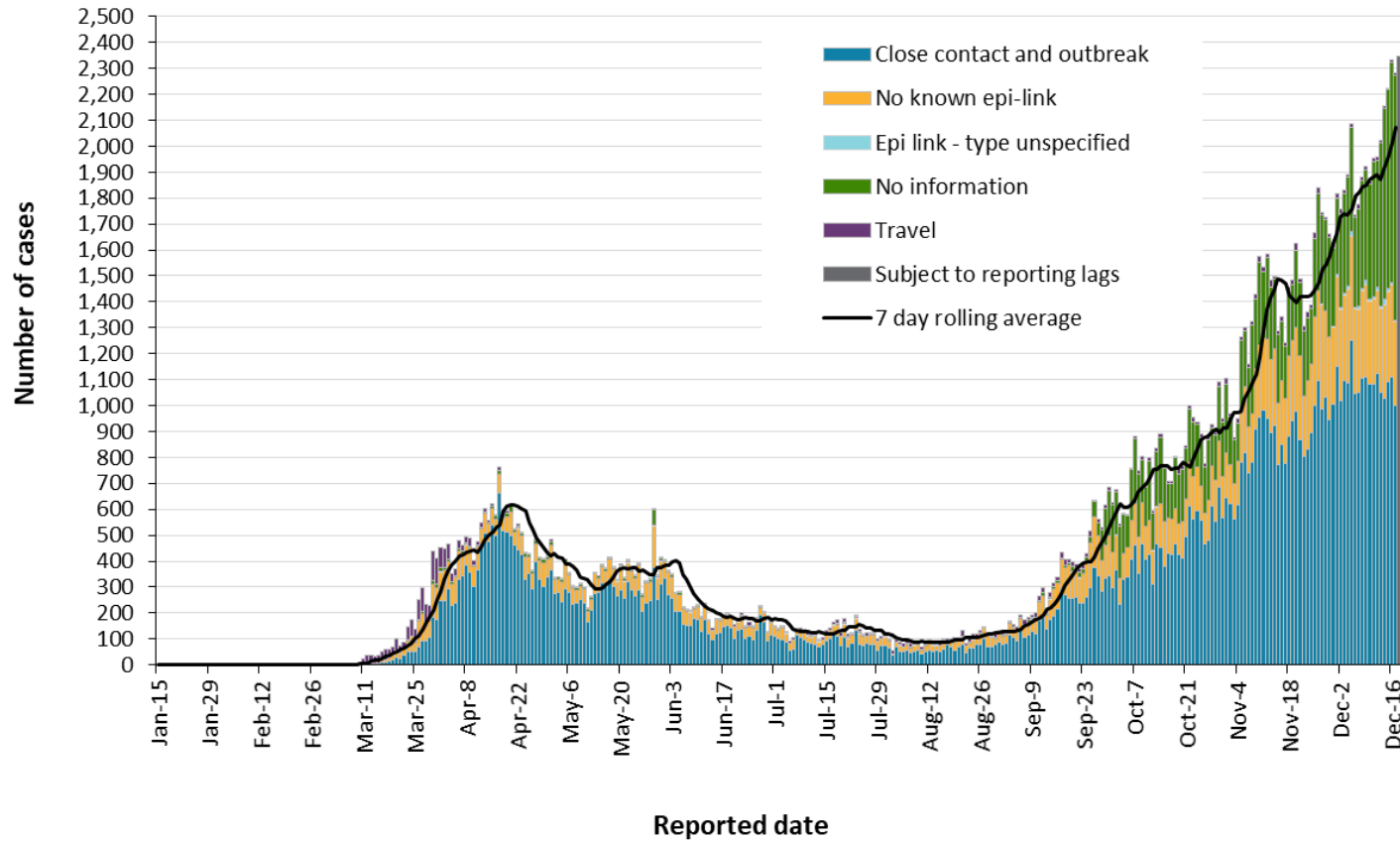
Long-term care home cases	Change in cases December 19	Change in cases December 20	Cumulative case count as of December 20
Residents	90	93	9,938
Health care workers	29	48	3,917
Deaths among residents	18	17	2,581
Deaths among health care workers	0	0	8

**Note:** Information on how long-term care home residents and health care workers are identified is available in the technical notes. Also, the change in cases in these categories may represent existing case records that have been updated.

**Data Source:** CCM plus

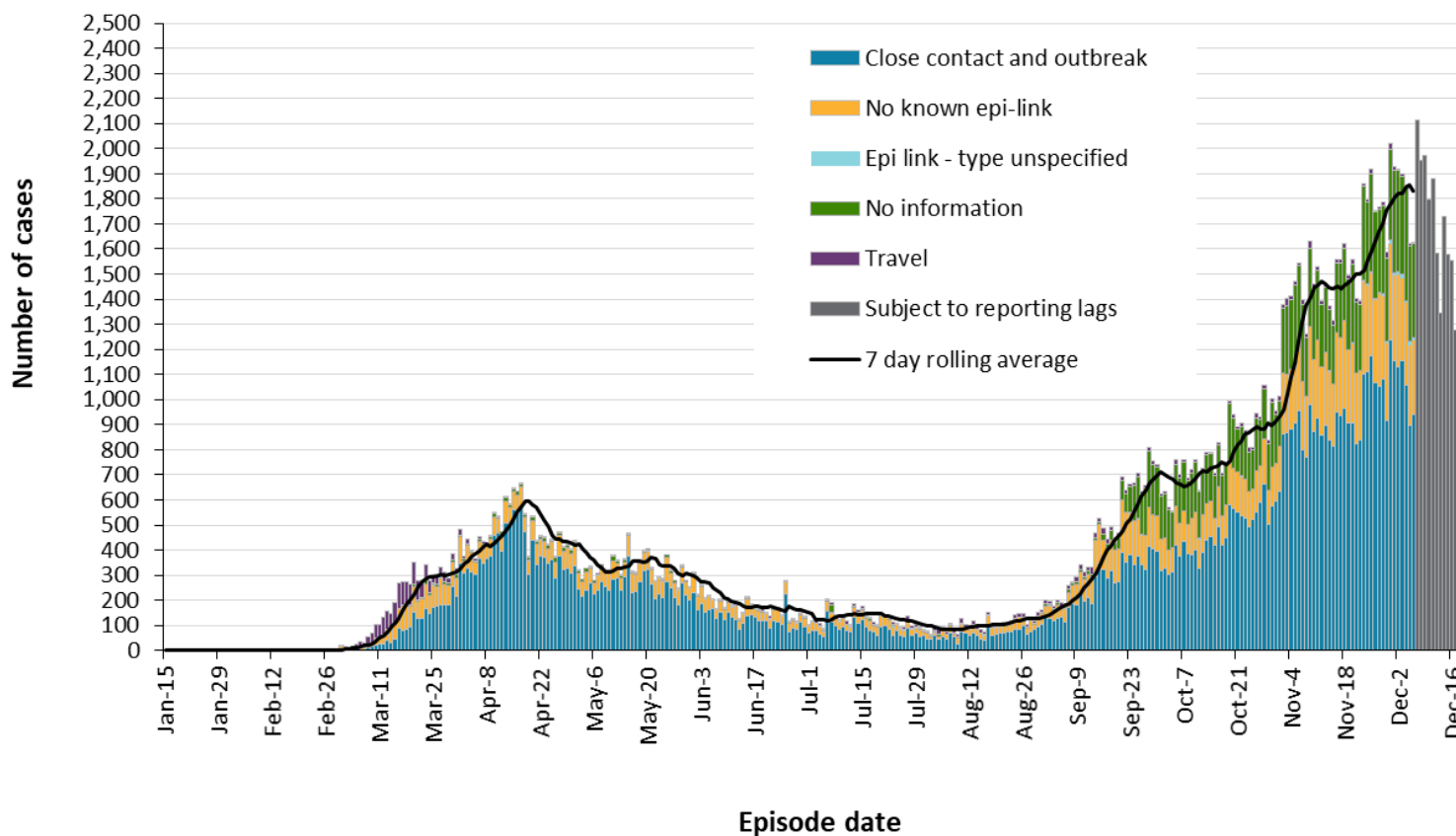
# Time

**Figure 1. Confirmed cases of COVID-19 by likely acquisition and public health unit reported date: Ontario, January 15, 2020 to December 20, 2020**



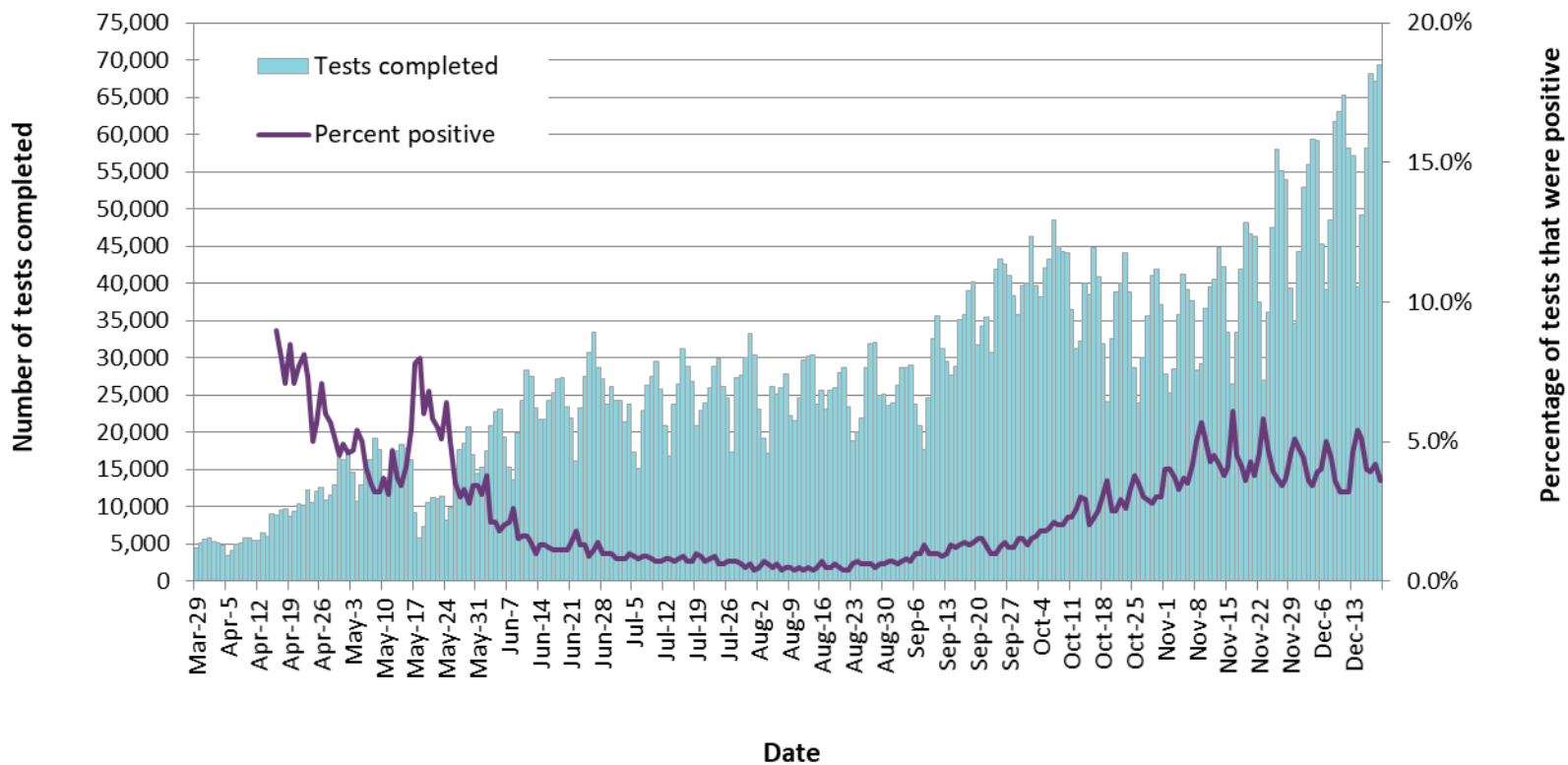
Data Source: CCM plus

**Figure 2. Confirmed cases of COVID-19 by likely acquisition and approximation of symptom onset date: Ontario, January 15, 2020 to December 20, 2020**



**Note:** Not all cases may have an episode date and those without one are not included in the figure. Episode date is defined and available in the technical notes.  
**Data Source:** CCM plus

**Figure 3. Number of COVID-19 tests completed and percent positivity: Ontario, March 29, 2020 to December 19, 2020**

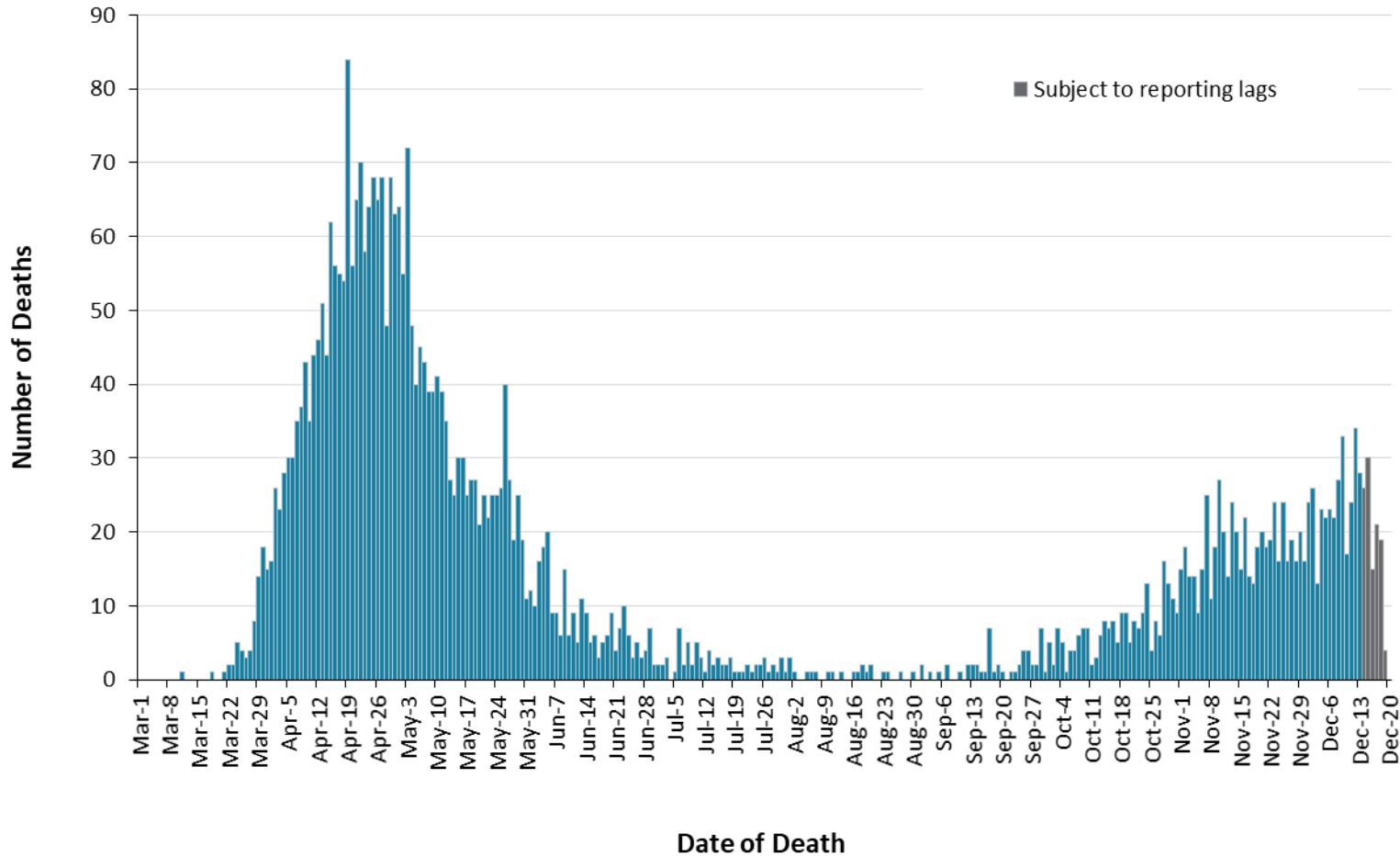


**Note:** The number of tests performed does not reflect the number of specimens or persons tested. More than one test may be performed per specimen or per person. As such, the percentage of tests that were positive does not necessarily translate to the number of specimens or persons testing positive.

**Data Source:** The Provincial COVID-19 Diagnostics Network, data reported by member microbiology laboratories.

# Severity

Figure 4. Confirmed deaths among COVID-19 cases by date of death: Ontario, March 1, 2020 to December 20, 2020



**Note:** Cases without a death date are not included in the figure.

**Data Source:** CCM plus

COVID-19 in Ontario: January 15, 2020 to December 20, 2020



**Table 4. Confirmed cases of COVID-19 by severity: Ontario**

	Cumulative case count as of December 20	Percentage of all cases
Cumulative deaths reported (please note there may be a reporting delay for deaths)	4,167	2.6%
Deaths reported in ages: 19 and under	1	<0.1%
Deaths reported in ages: 20-39	17	<0.1%
Deaths reported in ages: 40-59	167	0.4%
Deaths reported in ages: 60-79	1,098	4.8%
Deaths reported in ages: 80 and over	2,884	24.0%
Ever in ICU	1,766	1.1%
Ever hospitalized	8,867	5.6%

**Note:** Not all cases have an age reported. Data corrections or updates can result in case records being removed and/or updated and may result in totals differing from past publicly reported case counts.

**Data Source:** CCM plus

## Geography

**Table 5. Summary of recent confirmed cases of COVID-19 by public health unit and region: Ontario**

Public Health Unit Name	Change in cases December 19	Change in cases December 20	Cumulative case count	Cumulative rate per 100,000 population
Northwestern Health Unit	2	1	140	159.7
Thunder Bay District Health Unit	8	9	501	334.1
<b>TOTAL NORTH WEST</b>	10	10	641	269.7
Algoma Public Health	-1	1	63	55.1
North Bay Parry Sound District Health Unit	4	0	108	83.2
Porcupine Health Unit	0	2	121	145.0
Public Health Sudbury & Districts	-1	2	251	126.1
Timiskaming Health Unit	7	2	39	119.3
<b>TOTAL NORTH EAST</b>	9	7	582	104.1
Ottawa Public Health	38	32	9,370	888.4
Eastern Ontario Health Unit	22	11	1,193	571.6
Hastings Prince Edward Public Health	7	6	250	148.4
Kingston, Frontenac and Lennox & Addington Public Health	13	6	466	219.1
Leeds, Grenville & Lanark District Health Unit	3	0	633	365.5
Renfrew County and District Health Unit	5	2	217	199.8
<b>TOTAL EASTERN</b>	88	57	12,129	629.6

Public Health Unit Name	Change in cases December 19	Change in cases December 20	Cumulative case count	Cumulative rate per 100,000 population
Durham Region Health Department	82	91	6,271	880.3
Haliburton, Kawartha, Pine Ridge District Health Unit	10	8	456	241.4
Peel Public Health	468	480	34,947	2176.1
Peterborough Public Health	4	6	270	182.5
Simcoe Muskoka District Health Unit	62	61	3,076	513.0
York Region Public Health	326	192	14,855	1,211.9
<b>TOTAL CENTRAL EAST</b>	952	838	59,875	1,336.3
Toronto Public Health	486	611	51,841	1,661.4
<b>TOTAL TORONTO</b>	486	611	51,841	1,661.4
Chatham-Kent Public Health	6	1	583	548.4
Grey Bruce Health Unit	9	6	410	241.3
Huron Perth Public Health	14	4	534	382.1
Lambton Public Health	19	8	521	397.8
Middlesex-London Health Unit	80	64	2,472	487.1
Southwestern Public Health	25	21	937	443.0
Windsor-Essex County Health Unit	151	138	5,841	1,374.9
<b>TOTAL SOUTH WEST</b>	304	242	11,298	668.2
Brant County Health Unit	5	16	834	537.4
City of Hamilton Public Health Services	88	36	4,916	830.2

Public Health Unit Name	Change in cases December 19	Change in cases December 20	Cumulative case count	Cumulative rate per 100,000 population
Haldimand-Norfolk Health Unit	10	19	778	682.0
Halton Region Public Health	97	92	4,852	783.7
Niagara Region Public Health	128	68	3,113	658.9
Region of Waterloo Public Health and Emergency Services	91	94	5,045	863.3
Wellington-Dufferin-Guelph Public Health	48	33	2,149	689.0
<b>TOTAL CENTRAL WEST</b>	467	358	21,687	761.1
<b>TOTAL ONTARIO</b>	<b>2,316</b>	<b>2,123</b>	<b>158,053</b>	<b>1,063.3</b>

**Notes:** Health units with data corrections or updates could result in records being removed from totals resulting in negative counts.

**Data Source:** CCM plus

## Outbreaks

**Table 6. Summary of recent confirmed COVID-19 outbreaks reported in long-term care homes, retirement homes and hospitals by status: Ontario**

Institution type	Change in outbreaks December 19	Change in outbreaks December 20	Number of ongoing outbreaks	Cumulative number of outbreaks reported
Long-term care homes	8	10	168	841
Retirement homes	4	5	94	435
Hospitals	2	1	52	217

**Note:** Ongoing outbreaks include all outbreaks that are 'Open' in CCM plus without a 'Declared Over Date' recorded, or where the outbreak started more than five months ago, even for outbreaks where the Outbreak Status value selected in CCM/iPHIS is 'OPEN'. The start of the outbreak is determined by the onset date of first case, or if missing the outbreak reported date, or else if that is also missing, then the outbreak created date.

**Data Source:** CCM plus

# Technical Notes

## Data Sources

- The data for this report were based on:
  - Information extracted from the Ontario Ministry of Health (Ministry) integrated Public Health Information System (iPHIS) database for Toronto Public Health as of **December 20, 2020 at 1 p.m.**
  - Information successfully uploaded to the Ministry from Local Systems: Toronto Public Health (Coronavirus Rapid Entry System) CORES as of **December 20, 2020 at 2 p.m.**
  - Information successfully extracted from the Public Health Case and Contact Management Solution (CCM) for all other PHUs by PHO as of **December 20, 2020 at 1 p.m.**
- CCM and CCM plus (which includes CCM, iPHIS, and CORES) are dynamic disease reporting systems, which allow ongoing updates to data previously entered. As a result, data extracted from CCM and the Local Systems represent a snapshot at the time of extraction and may differ from previous or subsequent reports.
- Ontario population projection data for 2020 were sourced from Ministry, IntelliHEALTH Ontario. Data were extracted on November 26, 2019.
- COVID-19 test data were based on information from The Provincial COVID-19 Diagnostics Network, reported by member microbiology laboratories.

## Data Caveats

- The data only represent cases reported to public health units and recorded in CCM plus. As a result, all counts will be subject to varying degrees of underreporting due to a variety of factors, such as disease awareness and medical care seeking behaviours, which may depend on severity of illness, clinical practice, changes in laboratory testing, and reporting behaviours.
- Lags in CCM plus data entry due to weekend staffing may result in lower case counts than would otherwise be recorded.
- Only cases meeting the confirmed case classification as listed in the MOH [COVID-19 case definition](#) are included in the report counts from CCM plus. This includes persons with a positive detection of serum/plasma immunoglobulin G (IgG) antibodies to SARS-CoV-2, which was added to the confirmed case definition on August 6, 2020.
- The number of tests performed does not reflect the number of specimens or persons tested. More than one test may be performed per specimen or per person. As such, the percentage of tests that were positive does not necessarily translate to the number of specimens or persons testing positive.
- Reported date is the date the case was reported to the public health unit.

- Case episode date is based on an estimate of the best date of disease onset. This date is calculated based on either the date of symptom onset, specimen collection/test date, or the date reported to the public health unit.
- Resolved cases are determined only for COVID-19 cases that have not died. Cases that have died are considered fatal and not resolved. The following cases are classified as resolved:
  - Cases that are reported as 'recovered' in CCM
  - Cases that are not hospitalized and are 14 days past their episode date
  - Cases that are currently hospitalized (no hospital end date entered) and have a status of 'closed' in CCM (indicating public health unit follow-up is complete) and are 14 days past their symptom onset date or specimen collection date
- Hospitalization includes all cases for which a hospital admission date was reported at the time of data extraction. It includes cases that have been discharged from hospital as well as cases that are currently hospitalized. Emergency room visits are not included in the number of reported hospitalizations.
- ICU admission includes all cases for which an ICU admission date was reported at the time of data extraction. It is a subset of the count of hospitalized cases. It includes cases that have been treated or that are currently being treated in an ICU.
- Orientation of case counts by geography is based on the diagnosing health unit (DHU). DHU refers to the case's public health unit of residence at the time of illness onset and not necessarily the location of exposure. Cases for which the DHU was reported as MOH (to signify a case that is not a resident of Ontario) have been excluded from the analyses.
- Likely source of acquisition is determined by examining the epidemiologic link and epidemiologic link status fields in CCM and local systems. If no epidemiologic link is identified in those fields the risk factor fields are examined to determine whether a case travelled, was associated with a confirmed outbreak, was a contact of a case, had no known epidemiological link (sporadic community transmission) or was reported to have an unknown source/no information was reported. Some cases may have no information reported if the case is untraceable, was lost to follow-up or referred to FNIHB. Cases with multiple risk factors were assigned to a single likely acquisition source group which was determined hierarchically in the following order:
  - For cases with an episode date *on or after* April 1, 2020: Outbreak-associated > close contact of a confirmed case > travel > no known epidemiological link > information missing or unknown
  - For cases with an episode date *before* April 1, 2020: Travel > outbreak-associated > close contact of a confirmed case > no known epidemiological link > information missing or unknown
- Deaths are determined by using the outcome field in CCM plus. Any case marked 'Fatal' is included in the deaths data. The CCM field Type of Death is not used to further categorize the data.

- The date of death is determined using the outcome date field for cases marked as 'Fatal' in the outcome field.
- COVID-19 cases from CCM plus for which the Classification and/or Disposition was reported as ENTERED IN ERROR, DOES NOT MEET DEFINITION, IGNORE, DUPLICATE, or any variation on these values have been excluded. The provincial case count for COVID-19 includes cases that are counted once across all systems from which the case data are obtained. Duplicate records may exist if these records were not identified and resolved prior to data upload to the Ministry.
- Ongoing outbreaks include all outbreaks that are 'Open' in CCM plus without a 'Declared Over Date' recorded, or where the outbreak started more than five months ago, even for outbreaks where the Outbreak Status value selected in CCM/iPHIS is 'OPEN'. The start of the outbreak is determined by the onset date of first case, or if missing the outbreak reported date, or else if that is also missing, then the outbreak created date.
- 'Long-term care home residents' includes cases that reported 'Yes' to the risk factor 'Resident of a long-term care home'; or 'Yes' to the risk factor 'Resident of nursing home or other chronic care facility' and reported to be part of an outbreak assigned as a long-term care home (via the Outbreak number or case comments field); or were reported to be part of an outbreak assigned as a long-term care home (via the outbreak number or case comments field) with an age over 70 years and did not report 'No' to the risk factors 'Resident of long-term care home' or 'Resident of nursing home or other chronic care facility'. 'Long-term care home residents' excludes cases that reported 'Yes' to any of the health care worker occupational risk factors.
- The 'health care workers' variable includes cases that reported 'Yes' to any of the occupation of health care worker, doctor, nurse, dentist, dental hygienist, midwife, other medical technicians, personal support worker, respiratory therapist, first responder.
- 'Health care workers associated with long-term care outbreaks' includes 'health care workers' reported to be part of an outbreak assigned as a long-term care home (via the outbreak number or case comments field). Excludes cases that reported 'Yes' to risk factors 'Resident of long-term care home' or 'Resident of nursing home or other chronic care facility' and 'Yes' to the calculated 'health care workers' variable.
- Percent change is calculated by taking the difference between the current period (i.e., daily count or sum of the daily count over a 7-day period) and previous period (i.e., daily count or sum of the daily count over a 7-day period), divided by the previous period.



## Appendix A

**Table A1. Weekly rates of confirmed COVID-19 cases per 100,000 population over recent rolling 7-day periods, by reported date and public health unit: Ontario, December 5, 2020 to December 17, 2020**

Public Health Unit Name	Dec 5 to Dec 11	Dec 6 to Dec 12	Dec 7 to Dec 13	Dec 8 to Dec 14	Dec 9 to Dec 15	Dec 10 to Dec 16	Dec 11 to Dec 17	% change from Dec 5-11 to Dec 11-17
<b>NORTH WEST</b>								
Northwestern Health Unit	9.1	6.8	5.7	5.7	3.4	3.4	3.4	-62.6%
Thunder Bay District Health Unit	45.3	41.3	40.7	43.3	36.7	32.0	37.3	-17.7%
<b>NORTH EAST</b>								
Algoma Public Health	0.9	0.9	0.9	0.9	0.9	0.9	0.0	-100.0%
North Bay Parry Sound District Health Unit	5.4	4.6	4.6	4.6	4.6	9.2	10.8	100.0%
Porcupine Health Unit	0.0	1.2	2.4	2.4	2.4	2.4	3.6	N/A
Public Health Sudbury & Districts	4.5	5.0	3.5	3.5	3.5	3.5	4.5	0.0%
Timiskaming Health Unit	24.5	21.4	21.4	18.4	12.2	15.3	15.3	-37.6%
<b>EASTERN</b>								
Ottawa Public Health	30.2	30.1	29.9	30.9	29.2	29.9	30.9	+2.3%

Public Health Unit Name	Dec 5 to Dec 11	Dec 6 to Dec 12	Dec 7 to Dec 13	Dec 8 to Dec 14	Dec 9 to Dec 15	Dec 10 to Dec 16	Dec 11 to Dec 17	% change from Dec 5-11 to Dec 11-17
Eastern Ontario Health Unit	60.4	65.2	51.7	53.2	55.1	58.9	55.6	-7.9%
Hastings Prince Edward Public Health	27.9	28.5	29.7	31.5	26.1	22.0	14.2	-49.1%
Kingston, Frontenac and Lennox & Addington Public Health	41.4	40.9	40.9	44.2	44.2	43.7	40.9	-1.2%
Leeds, Grenville & Lanark District Health Unit	41.6	41.6	40.4	38.1	33.5	31.8	26.6	-36.1%
Renfrew County and District Health Unit	38.7	41.4	36.8	29.5	29.5	17.5	18.4	-52.5%
<b>CENTRAL EAST</b>								
Durham Region Health Department	88.2	77.6	74.8	75.4	83.5	87.3	88.9	+0.8%
Haliburton, Kawartha, Pine Ridge District Health Unit	28.1	31.2	34.4	33.9	34.9	30.7	27.0	-3.9%
Peel Public Health	195.0	185.2	184.6	197.9	197.6	194.0	194.0	-0.5%

Public Health Unit Name	Dec 5 to Dec 11	Dec 6 to Dec 12	Dec 7 to Dec 13	Dec 8 to Dec 14	Dec 9 to Dec 15	Dec 10 to Dec 16	Dec 11 to Dec 17	% change from Dec 5-11 to Dec 11-17
Peterborough Public Health	10.8	12.2	13.5	12.8	14.2	15.5	15.5	+43.5%
Simcoe Muskoka District Health Unit	54.7	53.7	49.7	47.7	46.7	52.4	55.7	+1.8%
York Region Public Health	106.6	102.7	103.3	101.9	103.0	101.1	103.9	-2.5%
<b>TORONTO</b>								
Toronto Public Health	120.7	120.8	124.2	130.6	135.5	142.4	145.4	+20.5%
<b>SOUTH WEST</b>								
Chatham-Kent Public Health	21.6	22.6	20.7	23.5	24.5	24.5	32.0	+48.1%
Grey Bruce Health Unit	17.7	19.4	20.6	20.0	17.7	16.5	16.5	-6.8%
Huron Perth Public Health	44.4	47.9	45.1	43.6	55.8	60.1	59.4	+33.8%
Lambton Public Health	15.3	16.0	18.3	16.0	19.9	24.4	35.9	+134.6%
Middlesex-London Health Unit	51.4	52.4	54.0	58.1	50.8	55.0	62.3	+21.2%
Southwestern Public Health	49.6	56.7	65.7	64.8	73.8	79.4	79.4	+60.1%
Windsor-Essex County Health Unit	145.5	149.7	173.0	172.8	188.5	211.4	241.0	+65.6%

Public Health Unit Name	Dec 5 to Dec 11	Dec 6 to Dec 12	Dec 7 to Dec 13	Dec 8 to Dec 14	Dec 9 to Dec 15	Dec 10 to Dec 16	Dec 11 to Dec 17	% change from Dec 5-11 to Dec 11-17
<b>CENTRAL WEST</b>								
Brant County Health Unit	46.4	54.8	65.1	70.9	72.2	70.9	77.3	+66.6%
City of Hamilton Public Health Services	92.5	101.3	110.6	107.1	111.5	116.7	127.7	+38.1%
Haldimand-Norfolk Health Unit	46.5	46.5	46.5	48.2	45.6	44.7	41.2	-11.4%
Halton Region Public Health	70.4	68.3	70.7	64.6	68.2	71.7	74.1	+5.3%
Niagara Region Public Health	55.0	60.1	63.9	68.4	74.9	76.6	79.4	+44.4%
Region of Waterloo Public Health and Emergency Services	78.0	77.3	81.3	79.9	84.7	87.3	86.9	+11.4%
Wellington-Dufferin-Guelph Public Health	80.5	87.5	88.8	88.5	88.2	94.6	93.9	+16.6%
<b>TOTAL ONTARIO</b>	<b>88.9</b>	<b>88.1</b>	<b>90.0</b>	<b>92.5</b>	<b>94.9</b>	<b>97.6</b>	<b>100.5</b>	<b>+13.0%</b>

**Note:** Rates are based on the sum of the daily case counts during the date ranges specified in each column.

**Data Source:** CCM plus

## Disclaimer

This document was developed by Public Health Ontario (PHO). PHO provides scientific and technical advice to Ontario's government, public health organizations and health care providers. PHO's work is guided by the current best available evidence at the time of publication.

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## For Further Information

For more information, email [cd@oahpp.ca](mailto:cd@oahpp.ca).

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